

***An analysis of the Swedish
Biotech Pipeline
April, 2007***

swedenBIO
The Swedish Biotechnology Industry Organization

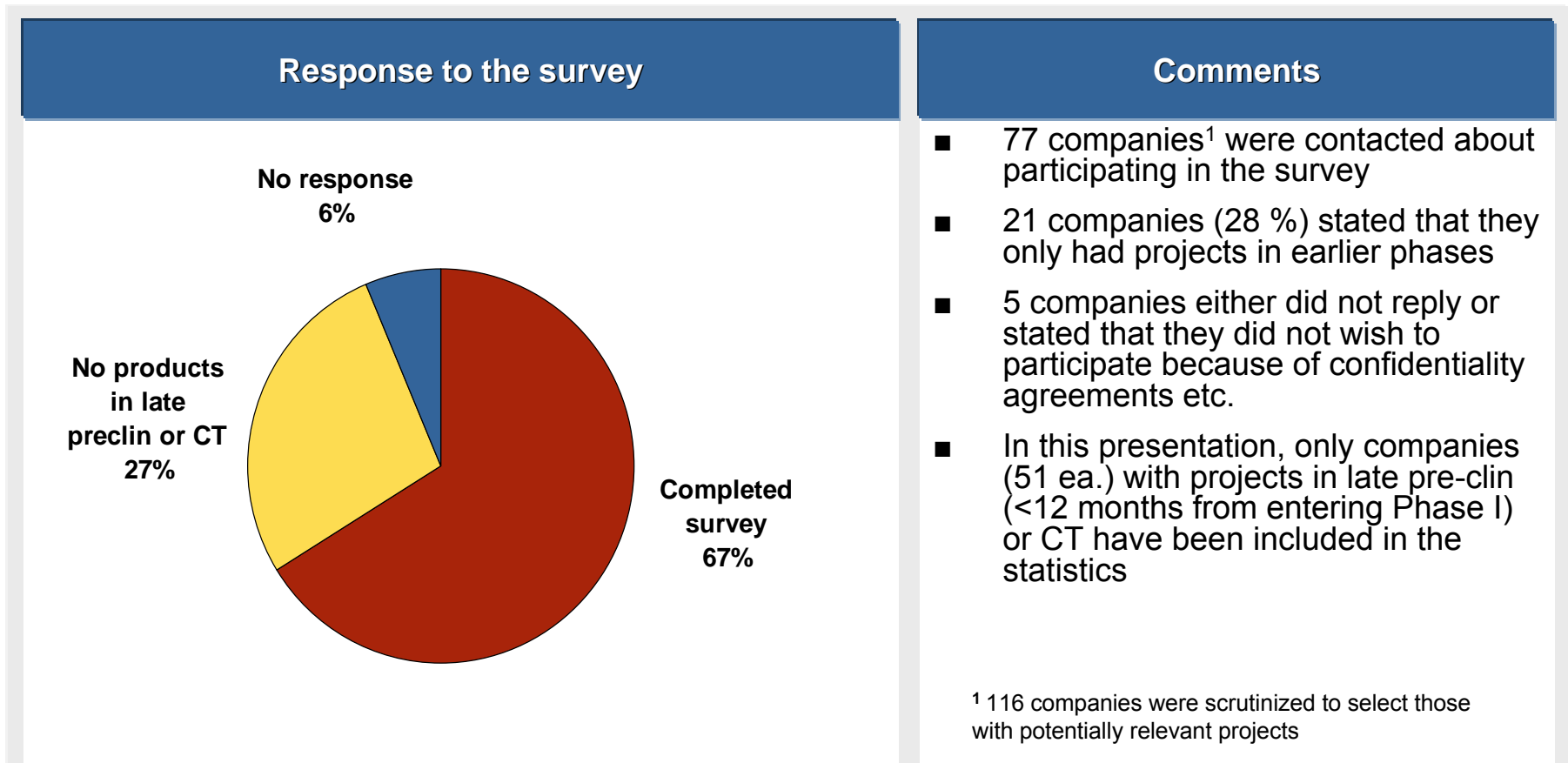

Invest in Sweden Agency



A Survey of the Swedish Biotech pipeline

- In February-March 2007 a survey of the Swedish biotech pipeline was conducted by SwedenBIO in cooperation with Invest in Sweden Agency (ISA) and VINNOVA
- Results are impressive: of the 169 projects, 65 Swedish projects, excluding AstraZeneca, are in clinical trials (phase one, two or three) and 45 CDs are in late pre-clinical trials (less than 12 months from entering Phase I)
- Only NCEs (New Chemical Entities) from the Swedish R&D units at AstraZeneca have been included in the report
- SwedenBIO, ISA and VINNOVA will use the results to promote the Swedish biotech industry and to generate business contacts
- SwedenBIO, ISA and VINNOVA would like to thank all the participating companies

77 companies were contacted about the survey and 72 responded

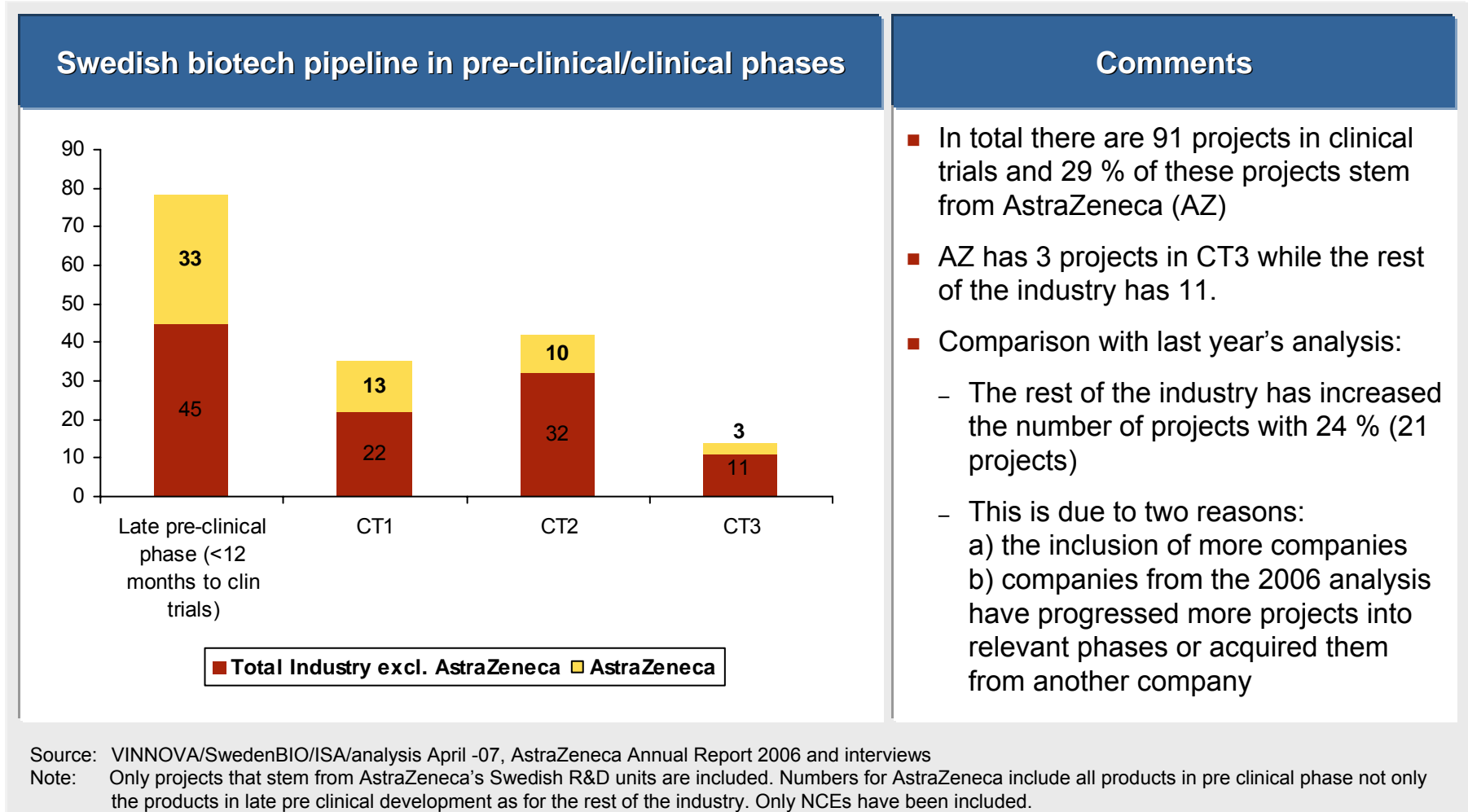


Source: Interviews, VINNOVA/SwedenBIO/ISA analysis April -07, AstraZeneca Annual Report 2006 and interviews

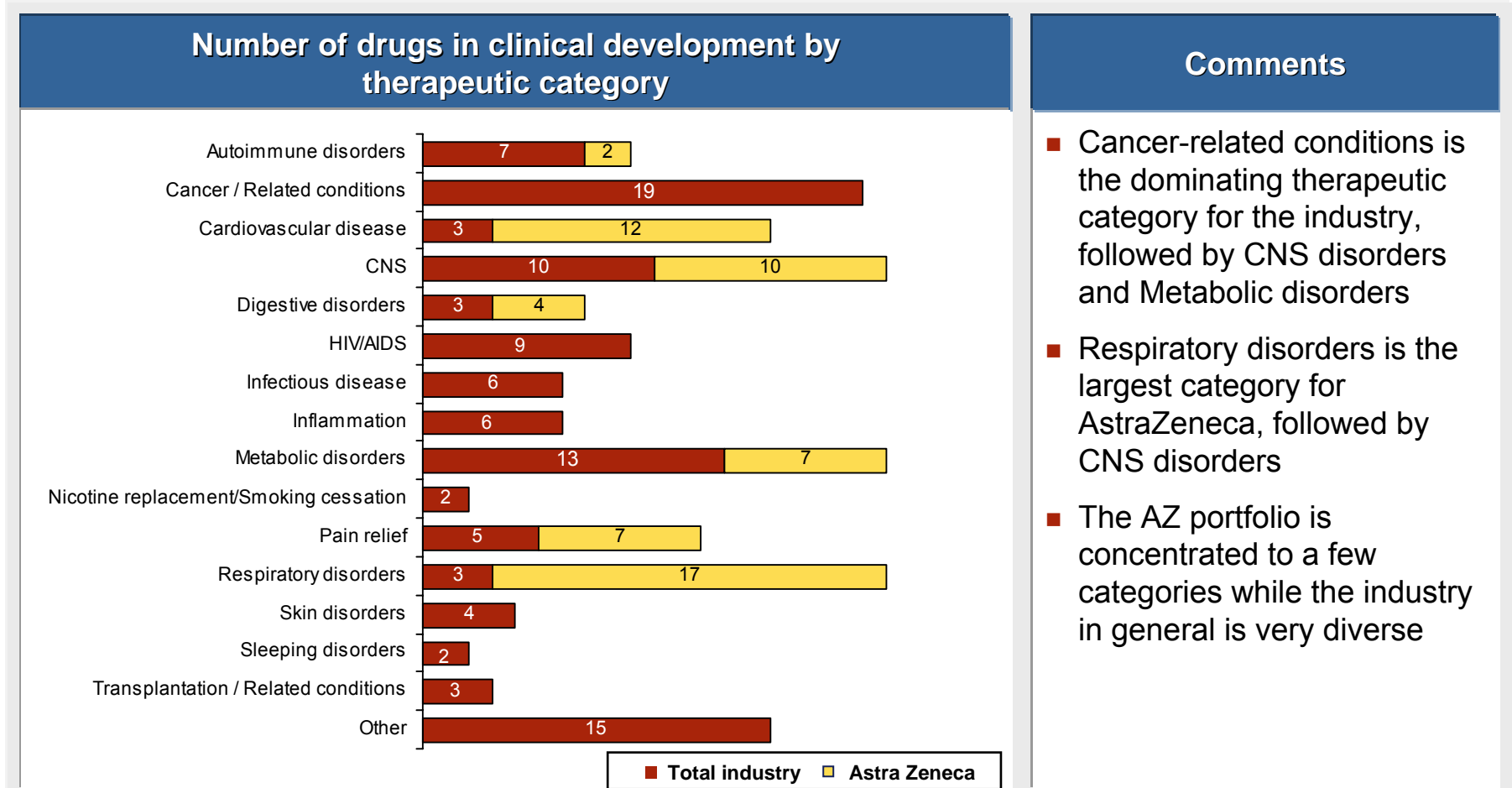
Note: AstraZeneca is not included in this graph. In some cases, survey data has been completed with information from company homepages

Swedish biotech situation – Pipeline

The Swedish biotech pipeline has 169 projects in late pre-clinical or clinical trials. 59 of these projects stem from the Swedish R&D units at AstraZeneca



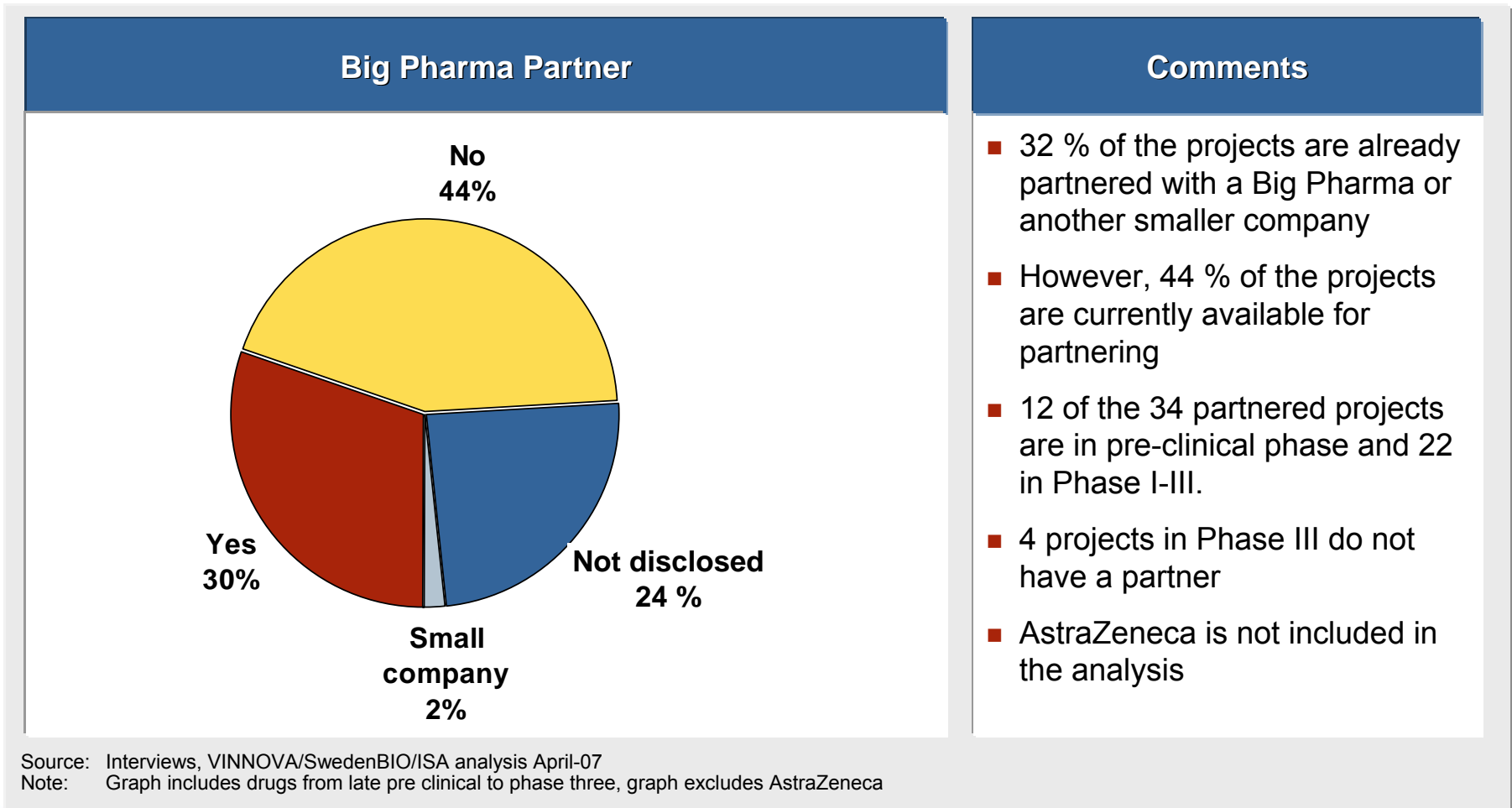
The dominating therapeutic category for non- AZ projects is cancer-related conditions



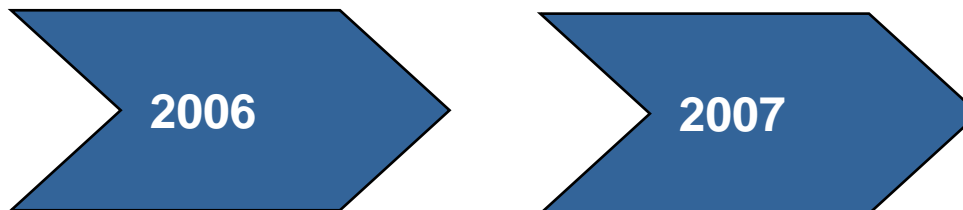
Source: VINNOVA/SwedenBIO/ISA/analysis April -07, AstraZeneca Annual Report 2006 and interviews

Note: Only projects that stem from AstraZeneca's Swedish R&D units are included. Numbers for AstraZeneca include all products in pre clinical phase not only the products in late pre clinical development as for the rest of the industry. Only NCEs have been included.

49 Swedish projects have not yet been partnered with Big Pharma or another company



Comparison 2006-2007



No. of companies	69	77
No. of companies with relevant projects	39	51
No. of projects	89	110
Projects in		
• Late Pre-clin	41	45
• Phase I	18	22
• Phase II	25	32
• Phase III	5	11

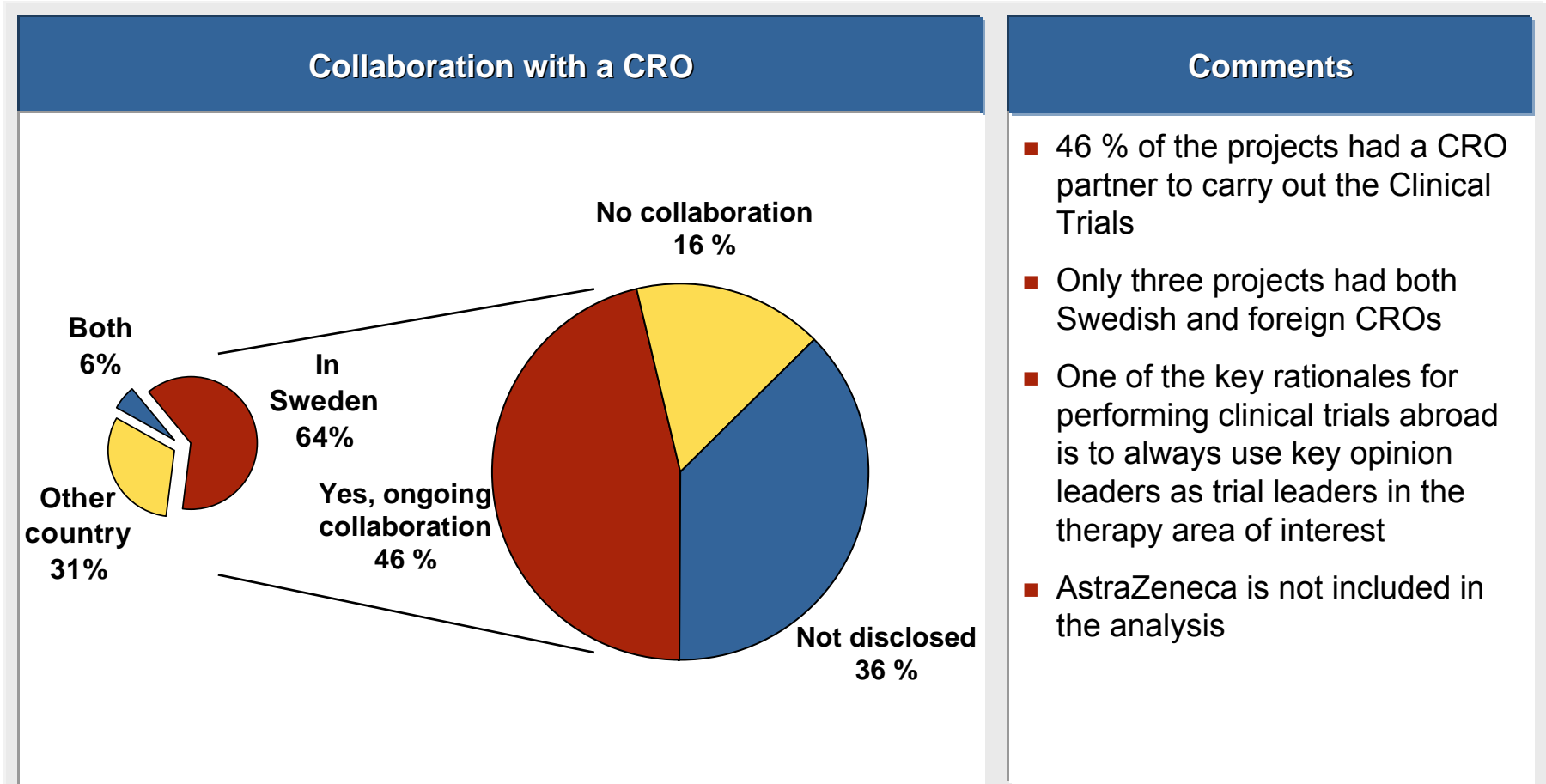
AstraZeneca is not included in this analysis

39 % of the projects originate from collaborations with academia

Origin of biotech drugs in development	Comments										
<p>A pie chart illustrating the origin of biotech drugs in development. The chart is divided into four segments: Internal (38%, yellow), Academia (25%, red), Other company (23%, blue), and Internal & Academia (14%, light blue).</p> <table border="1"><thead><tr><th>Origin</th><th>Percentage</th></tr></thead><tbody><tr><td>Internal</td><td>38%</td></tr><tr><td>Academia</td><td>25%</td></tr><tr><td>Other company</td><td>23%</td></tr><tr><td>Internal & Academia</td><td>14%</td></tr></tbody></table>	Origin	Percentage	Internal	38%	Academia	25%	Other company	23%	Internal & Academia	14%	<ul style="list-style-type: none">■ Most projects originate from internal research, or from collaborations with academia.■ In all, 39 % of the compounds originate at least in part from academia. This can be due to<ul style="list-style-type: none">- Strong collaborative ties industry-academia- Companies have been founded around compounds discovered in academia■ AstraZeneca is not included in this analysis
Origin	Percentage										
Internal	38%										
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Source: Interviews, VINNOVA/SwedenBIO/ISA analysis April -07
Note: Graph excludes AstraZeneca

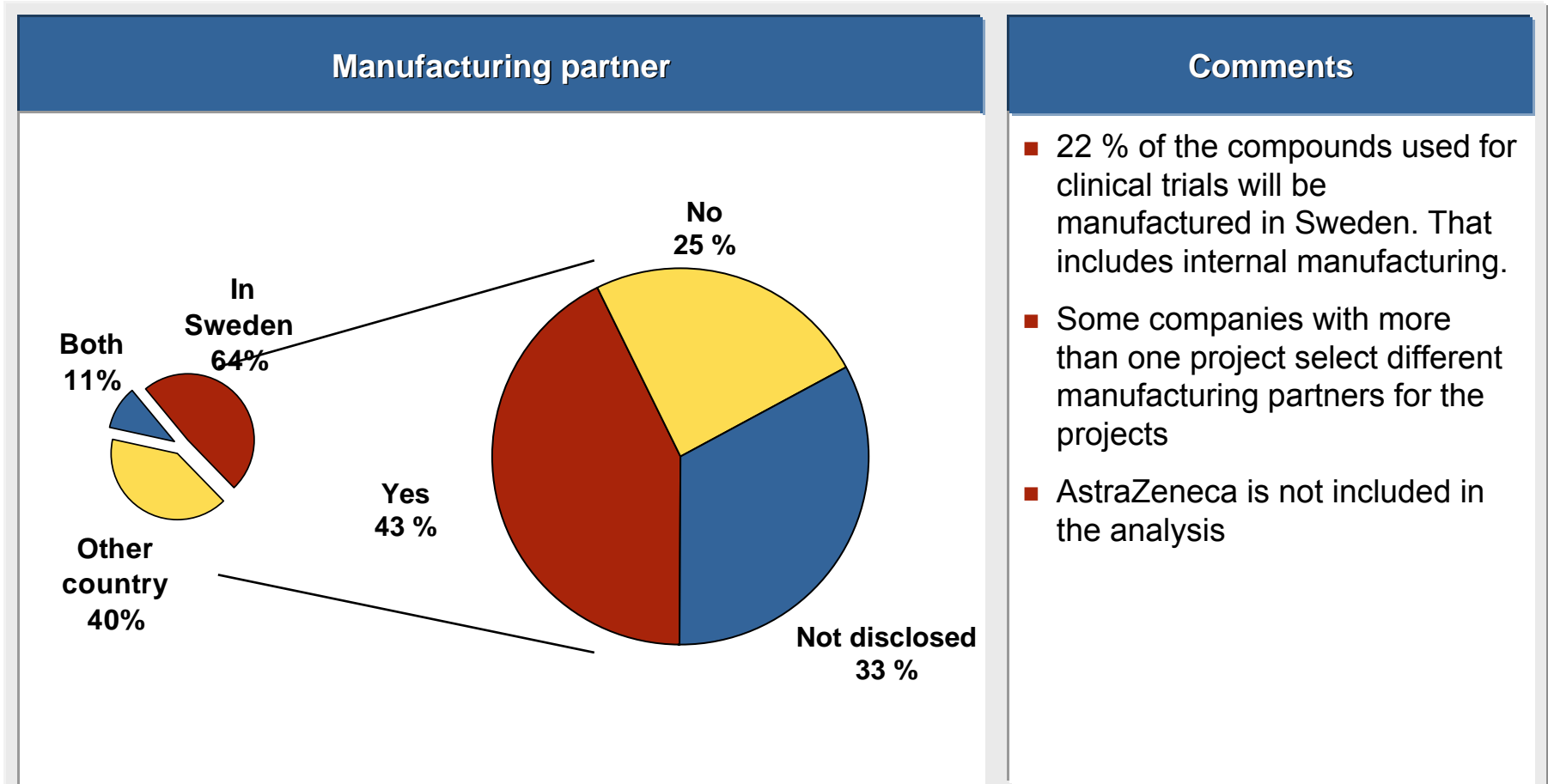
29 % of the projects are tried by Swedish CROs



Source: Interviews, VINNOVA/SwedenBIO/ISA analysis April -07

Note: Graph includes drugs from late pre clinical to phase three, graph excludes AstraZeneca

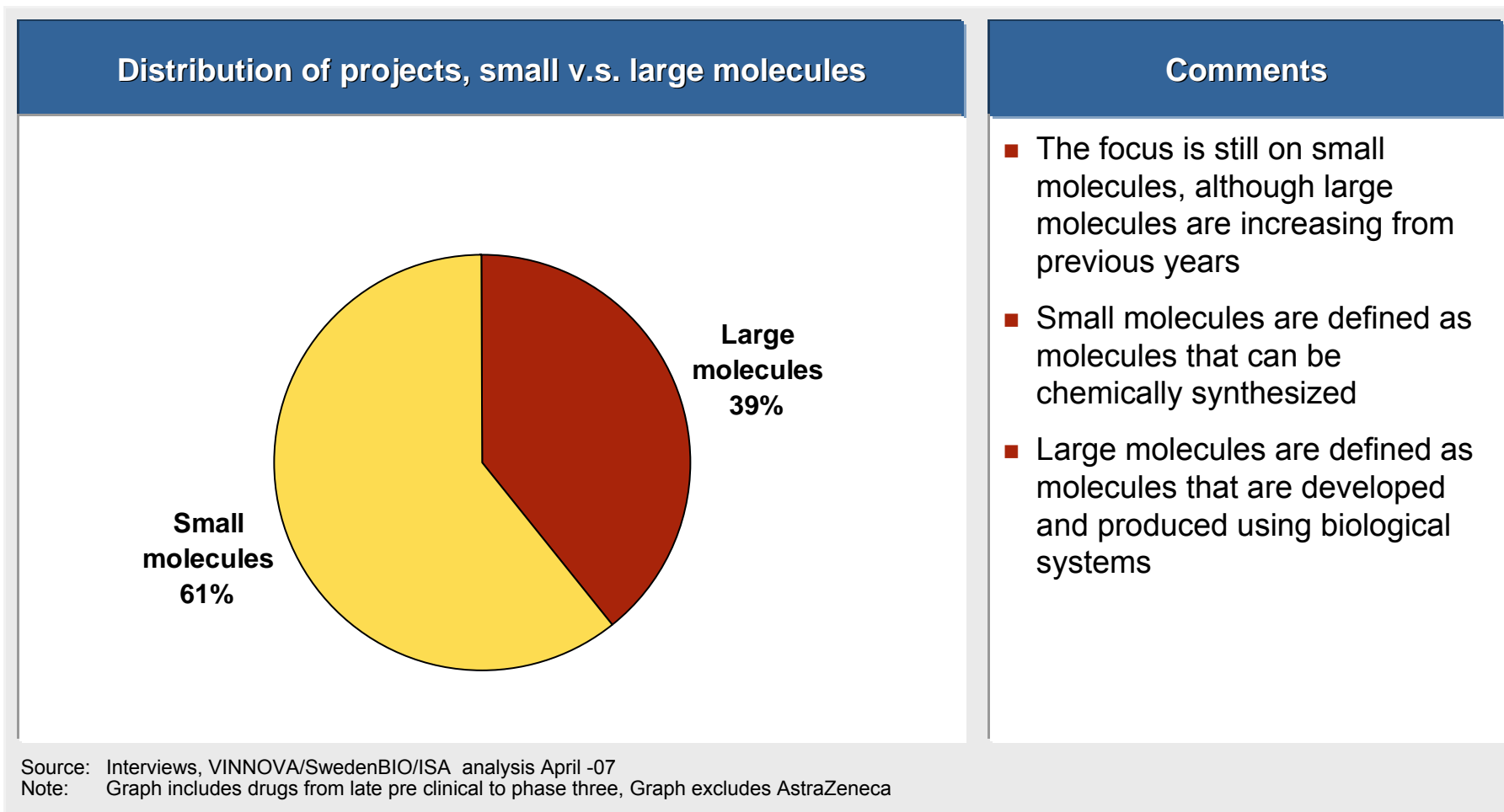
41 % of the projects have an external manufacturing partner



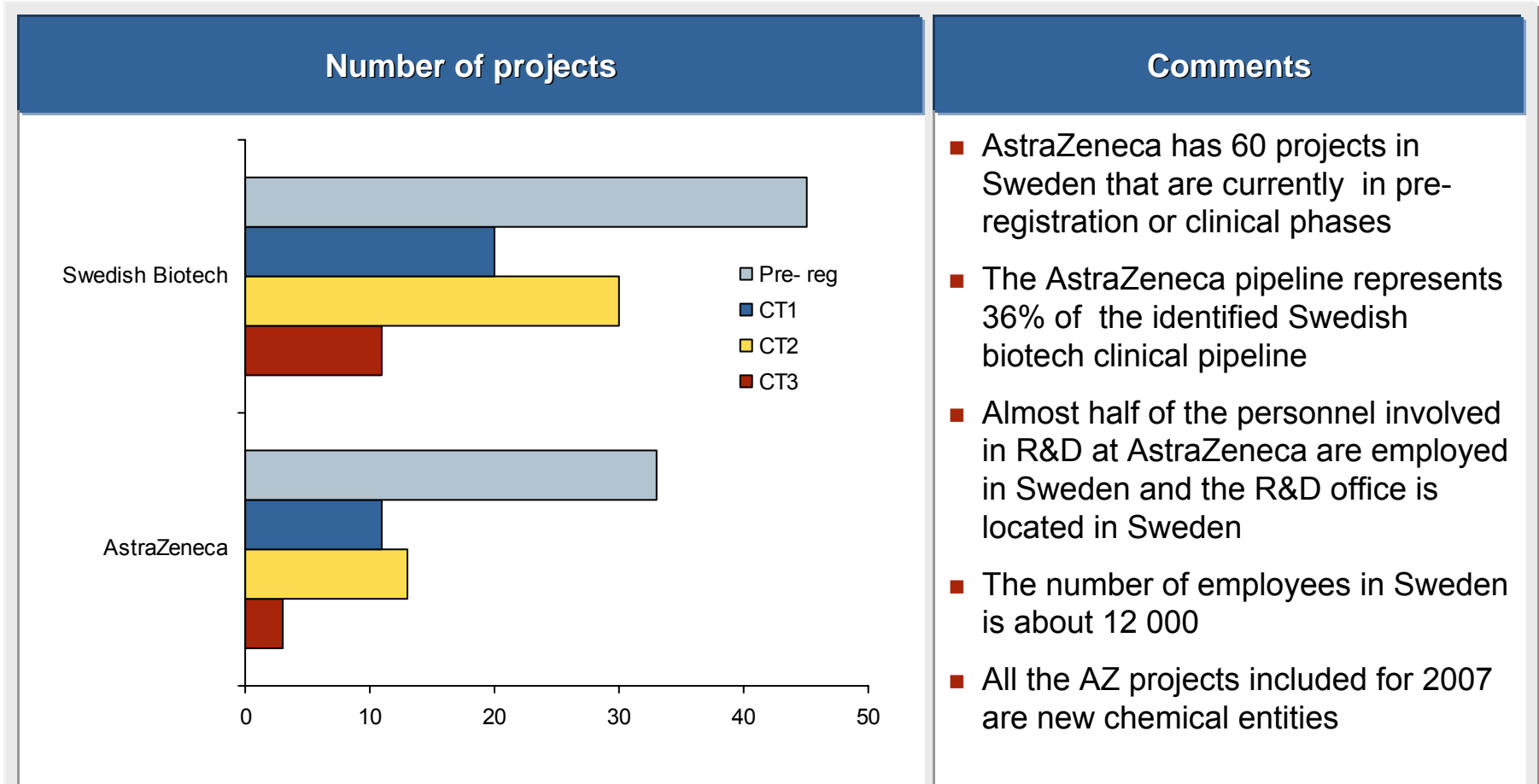
Source: Interviews, VINNOVA/SwedenBIO/ISA analysis April -07

Note: Graph includes drugs from late pre clinical to phase three, graph excludes AstraZeneca

The majority of projects in development by Swedish biotech companies are small molecules



AstraZeneca has approximately 40 projects in clinical trials which is about 30% of the identified Swedish biotech pipeline



Source: VINNOVA/SwedenBIO/ISA/analysis April -07, AstraZeneca Annual Report 2006 and interviews

Note: Only projects that stem from AstraZeneca's Swedish R&D units are included, Graph includes only new chemical entities